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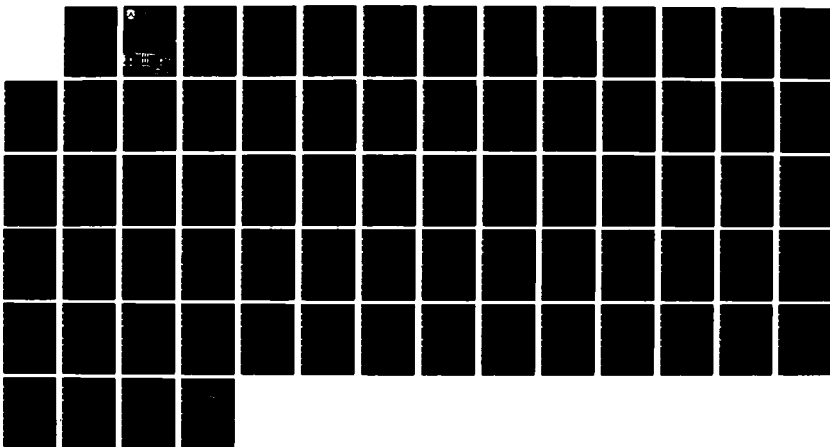
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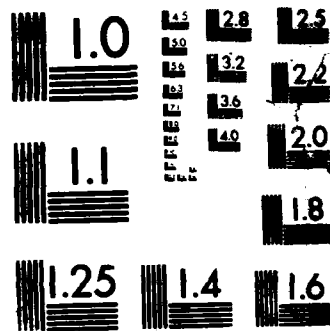
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RESEARCH REPORT

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CHANGING ROLE OF THE USAF NONCOMMISSIONED
OFFICER

By COLONEL WILLIAM P. KNUDSEN

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MAXWELL AIR FORCE BASE, ALABAMA

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CHANGING ROLE OF THE USAF
NONCOMMISSIONED OFFICER

by

William P. Knudsen
Colonel, USAF

A RESEARCH REPORT SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE RESEARCH
REQUIREMENT

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MAXWELL AIR FORCE BASE, ALABAMA

March 1987



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AIR WAR COLLEGE RESEARCH REPORT ABSTRACT

TITLE: The Changing Role of the United States Air Force
(USAF) Noncommissioned Officer (NCO)

AUTHOR: William P. Knudsen, Colonel, USAF

➤ The purpose of this research report is to analyze, evaluate, and determine the changing role of the ~~USAF NCO~~ in the year 2000. The current role of the NCO is documented as a frame of reference for noting change. The Megatrend model is used to determine the national environment at the turn of the century. The Air Force Project 2000 model is used to establish the Air Force atmosphere in the year 2000. The research reveals that the role of the 2000 NCO will have a new emphasis and critical importance to the AF and its ability to perform its mission.

BIOGRAPHICAL SKETCH

Colonel William P. Knudsen is a Command Pilot with 3500 hours of flying time in C-130's and A-10's. He has been a fighter squadron operations officer and commander. He has had headquarters tours in Alaskan Command, Eighth Air Force, Strategic Air Command, North American Air Defense Command and United States Readiness Command. Colonel Knudsen is enrolled in the Troy State Master of Science in Personnel Management Program and a member of the Air War College class of 1987.

CHAPTER ONE

By our everyday experience, stresses, and conflicts, and by modern learning and mass media we are continuously reminded that we are living in a world characterized by rapid social and technological change. The multiple revolutions that typify the transition from an industrial to a post-industrial society make the need for coping with change a task for every human being, but particularly for those persons who provide leadership for the social systems of man.

Visualizing Change

INTRODUCTION

Change was the inspiration for the study that led to this report. The author chose to study and think about change and Air Force (AF) Noncommissioned Officers (NCO) in order to "...plan in advance for the impact of change..." instead of waiting "...until change forces us to react." (33:i)

The NCO Corps was selected because of the important leadership and management role it performs in the AF. AF Pamphlet (AFP) 50-34 states "the Air Force organization's success or failure, its strength or weakness, is directly proportionate to the effectiveness of its NCOs." (57:6-1) The significant contribution of NCOs to the AF was also expressed by General Robert T. Marsh, former Commander, Air Force Systems Command. While discussing NCO jobs, General Marsh stated they are "...essential management positions of great responsibility...." (37:4-107)

The future role that the NCO will perform in the AF is the problem the author studied. The purpose of this report is to provide an answer. For the scope of the study the future was defined as the year 2000. The turn of the century was selected because the Air Force 2000 study (AF 2000) made "...a realistic assessment of the challenges likely to confront the Air Force at the turn of the century." (56:1) The AF 2000 realistic assessment provided a benchmark from which to determine the new roles that NCOs will be required to perform.

Another term that requires defining is Non-commissioned Officer. AF Regulation (AFR) 39-6, The Enlisted Force Organization, spells out the grades and specific responsibilities of NCOs:

Briefly, the Air Force considers as noncommissioned officers airmen in the grade of sergeant, staff sergeant, technical sergeant, master sergeant, senior master sergeant, and chief master sergeant. These noncommissioned officers are selected from airmen who demonstrate a capability to lead and influence other airmen. (59:2)

Within the AF, it is customary for NCOs to also have a continuing responsibility, on and off duty, for individual and group morale and esprit de corps. (59:2)

For the future role study, the author elected to consider the top four NCO ranks of Chief Master Sergeant (CMSgt), Senior Master Sergeant (SMSgt), Master Sergeant (MSgt), and Technical Sergeant (TSgt). General and specific NCO responsibilities for each of the four ranks

will be covered in Chapter Two. However, the four ranks selected have significant supervisory responsibilities and thus will be affected by and have a major effect on the AF as future change occurs.

The author's hypothesis is that the AF NCO at the turn of century will perform basically the same role as he does today. The specific "tools" used may change; however, the roles of leader, manager, supervisor, and technician will remain unchanged. It is possible the author's research may reveal a new or different role for the AF NCO in the year 2000.

As documented earlier, the NCO performs a significant role in the Air Force. How the NCO performs in the future will, to large extent, reflect how the Air Force will perform its mission. The Air Force has significant responsibilities to the people of the United States.

For example:

It is the intent of Congress to provide an Air Force that is capable, in conjunction with other armed forces, of preserving the peace and security, and providing for the defense of the United States, the territories, commonwealths, and possessions and any areas occupied by the United States; supporting the national policies; implementing the national objectives; and overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States. (58:1-1)

Thus, planning in advance for the impact of change on the NCO Corps is important for the Air Force and the fulfillment of its responsibilities.

The author selected two future oriented models to

frame the role of the AF NCO in the year 2000. First, the changes that society might experience are important; the Air Force is dynamically influenced, as are all U.S. organizations, by the pressures, directions, and changes within the American society. John Naisbitt's Megatrends will be used to briefly describe the environment the AF could be functioning within at the turn of the century.

The second study, the Air Force 2000 study: Air Power Entering the 21st Century, is pertinent because it addresses specific challenges likely to confront the Air Force in the future. These challenges are tied directly to the AF mission and thus provide specific activities the NCO of the future will deal with.

This report is divided into six chapters. Chapter one has introduced the problem. Chapter two discusses the current role of the AF NCO. Chapter three addresses the trends that might be prevalent in the United States in which the AF will exist at the turn of the century. Chapter four studies the AF challenges in the year 2000. Chapter five forecasts what roles the AF NCO may be required to perform in 2000. Chapter six provides an epilogue to the report.

Limitations of the Study

This study cannot present a clear view of the future or a flawless checklist which will prepare NCOs for the year 2000 and beyond.

CHAPTER TWO

"...The word sergeant comes from the Latin word servire, meaning to serve." (16:1-44)

THE CURRENT ROLE OF THE AIR FORCE NONCOMMISSIONED OFFICER

"The Air Force organization's success or failure, its strength or weakness, is directly proportionate to the effectiveness of its NCOs." This statement from AFP 50-34 places significant responsibility on the NCO Corps. However, there is a perception in the AF that an NCO's primary responsibility is as a technician.

The perception that all NCOs are primarily skilled specialists is a result of World War II (WWII). (59:1) As Martin Binkin documented in Military Technology and Defense Manpower, WWII was accompanied by a significant increase in complex weapons and support systems.

The new equipment significantly altered the requirement within the military for technical specialists. When WWII ended only 39 percent of army troops held "ground combat" jobs. "The remaining personnel performed a wide range of support jobs, which, in addition to the traditional services and craft occupations, included specialists associated with communications, radar, and fire control equipment...." (8:5)

This Army and Army Air Corps trend continued during the post-war years. Generally, AF NCOs were required to

perform the role of technician rather than the role of enlisted leader. (59:1) As the newly formed AF matured and marked technological advances occurred in nuclear weapons and modern electronics, senior AF leaders "...became aware of the need for better supervision and control over enlisted personnel than was being provided by the available commissioned officers." (59:2) The NCO was the logical choice to provide supervision for subordinates, while continuing to provide technical training. (59:1) This shift in NCO responsibilities from technical to more supervisory duties is not an absolute change. It is more an introduction of expanded supervisory responsibilities. In the AF, since WWII, the percentage of technical jobs in the military's enlisted ranks is almost twice as large as the proportion of technical jobs in the entire civilian economy. (8:9) However, the trend is similar in the civilian and military sector. That is, a growing percentage of both labor forces are grouped in the technical and craftsmen skills. Martin Binkin points out in Military Technology and Defense Manpower that, as AF jobs become more technical, the tasks in each job become more complex, and the people, airmen, performing these jobs must be more highly qualified. (8:10) The NCO must maintain his technical qualifications and expertise. But, he must also be able to manage, supervise, and lead.

While technical expertise is a major skill requirement

for junior NCOs, senior NCOs have leadership and managerial responsibilities. The specific responsibilities of the top three NCOs are:

The supervisor-manager NCOs are CMSgt, SMSgt, and MSgt and are considered senior NCOs. They must affectively apply all available resources to achieve the mission. Although thoroughly trained in the technical aspects of their specialities, they are leaders and managers with supervisory responsibilities, not supergrade technicians. (57:6-4)

Senior NCOs may serve as chief of a section or a branch and must ensure their personnel are technically trained and qualified. Senior NCOs must also "...take the lead in achieving, maintaining, and enforcing Air Force standards as well as the standards relating to good order and discipline." (57:6-4)

The fourth NCO rank discussed in this study is the TSgt, or technical supervisor. In addition to general NCO responsibilities, the TSgt has the following specific duties:

To perform complex technical duties in addition to providing responsible supervision. They are responsible for developing enlisted personnel under their supervision. They must obtain maximum performance from each subordinate and ensure that the product or service is of the quality necessary for total mission effectiveness. (57:6-4)

The TSgt is thus one of the important technician-supervisor NCOs who are the critical first-line supervisors in the AF.

A significant part of the NCO leadership role is to interact with airmen and junior NCOs. According to AFP 50-34, "The NCO, by virtue of knowledge and experience,

is the logical person to conduct both specialized and general training." (57:6-2) The NCO is the first-line supervisor who sets the AF standards.

The trend that started in the post-war years that witnessed NCOs performing duties previously reserved by officers is increasing. (8:5) The theme that NCOs today perform duties previously reserved for officers is also stressed by Mr. Bruce D. Callendar, former editor of the AF Times, when he wrote: "Today, NCOs in the top tier fill many slots that once were considered officer billets." (12:176) A further reflection of the increased quality of the NCO is illustrated in Table 2-1.

EDUCATIONAL LEVELS OF AF OFFICERS
AND AIRMEN FOR 1957 AND 1986

	1957		1986
	Officer	Airmen	Airmen
high school graduate	12.4	56.9	approx 90
college (two years or more, no degree)	25.0	3.7	approx 35
college degree/equivalent	35.9	0.5	approx 20
master's degree	4.7	.02	approx .02

TABLE 2-1 (16:1-44)

Today's NCO Corps has approximately the same educational level that the officer corps had in 1957. The trend depicted in Table 2-1 is continuing. Retired Chief Master Sergeant of the AF (CMSAF) James M. McCoy stated in 1985 that the "heavy enrollment in off-duty education programs...is a prime example of how today's NCOs want to become better

leaders and want to become better informed of what's going on in the world around them." (35:143)

Retired Chief Master Sergeant of the AF Sam E. Parish stated "the long-held military tradition that the officer provides leadership and the noncommissioned officer takes care of technical details is dead, as far as the Air Force is concerned." (35:143) His and the Air Force's bottom line on NCO responsibility is "real and direct leadership rests with NCOs." (35:143)

The trend of NCOs performing jobs previously held by officers will most likely continue at an accelerated pace. According to the February 9, 1987, issue of the "Air Force Times," Secretary of Defense Casper W. Weinberger has decided that, due to congressional action, the Air Force would have to reduce its officer corps by 1,300 personnel during fiscal year (FY) 87. This figure represents the AF share of approximately 1% of the Department of Defense (DOD) Officer Corps. Further, mandatory cuts for the DOD Officer Corps would be 2% in FY 88 and 3% in FY 89. According to Maj Gen Winfield Harpe, USAF the AF share could total approximately 6,500 officers for FYs 87, 88, and 89. (11:1&24) The reduction of approximately 6,500 AF officers during the next three years will ensure that the trend of capable NCOs assuming increased responsibilities in jobs previously performed by officers will continue.

Former CMSAF Arthur "Bud" Andrews has continually

stated that NCOs "...must seek and assume greater responsibilities inherent in assuming officer jobs." (2:82) Chief Andrews believes NCOs must place emphasis on leadership and management. Andrews' emphasis also contained a caution. He stressed that NCOs are leaders first, but they must also understand the principles of management.

The emphasis on leadership and acceptance of responsibility is also encouraged at the USAF Senior NCO Academy at Gunter AFS, Alabama. At the Academy:

The courses are designed to place Air Force Senior Noncommissioned Officers firmly in stride with the Service's Officer Corps and sharpen the leadership and management skills they must have to supervise junior enlisted members and middle-management NCOs. (26:8)

During the author's interview with the Commandant of the USAF Senior NCO Academy, CMSgt Frank T. Guidas, Jr. reinforced the importance of leadership and management training for senior NCOs along with a strong focus on communication skills. (29:--)

The skills learned in NCO Professional Military Education (PME) prepare the NCO for his role in the AF. As the AF first-line supervisor, the NCO performs a critical role with individual airmen. The NCO is a role model. Discipline and enforcement of standards are also NCO duties that are critical to the fabric of every organization within the Air Force.

In summary, today's AF NCOs are expected to be proficient in their technical and manual skills. But, today's AF NCO

also has significant leadership and management responsibilities that are critical to the mission of the Air Force. Today's AF NCO performs duties previously performed by commissioned officers. And, today's AF NCO is the key first-line supervisor responsible for educating today's airmen in technical and manual skills as well as in AF standards and discipline.

This chapter established the foundation of what the current role of the AF NCO is. In Chapter 3 the author introduces the Megatrend model in order to provide a framework of how American society may impact on the role of the AF NCO at the turn of the century.

CHAPTER THREE

In a world of accelerant change, next year is nearer to us than next month was in a more leisurely era. This radically altered fact of life must be internalized by decision-makers in industry, government and elsewhere. Their time horizons must be extended.

Future Shock

FUTURE TRENDS FOR THE UNITED STATES

It is not possible to predict the future with certainty. However, it is possible through historical research and detailed analysis of emerging trends to chart the general direction the future may take. An example of this type of analysis is the John Naisbitt book Megatrends.

Megatrends interprets ten trends...or megatrends... because of their significance for American society. All ten trends, if accurate, tell us the direction the country is moving. The direction is not a clear road map. Rather, it provides a frame of reference in which to think-speculate-plan-imagine what needs to be accomplished in order to be ready for the challenges of the future.

Naisbitt's ten megatrends are (1) industrial society to an information society (2) forced technology to high tech/high touch (3) national economy to a world economy (4) short term to long term planning (5) centralized to decentralized (6) institutional help to self-help (7) representative democracy to participatory democracy

(8) hierarchies to networking (9) north to south migration (10) either/or to multiple options. Possible ways each of these trends will impact on the role of the NCO will now be discussed.

The first megatrend, the movement from an industrial society to an information society, has been occurring for over 30 years. "In 1956, for the first time in American history, white collar workers in technical, managerial, and clerical positions outnumbered blue-collar workers."

(41:12) As a trend, we can see the American society mass-producing information in the same manner that heavy industries mass-produced in the past. A similar trend is evident in the Air Force.

In 1973, the Air Force leased or operated 1,300 general purpose computers worth \$866 million. Ten years later, the AF was the government's single largest user of computers. That same year, the AF budgeted \$647 million just to replace its base level computers. (41:148-149) The trend toward an information society places renewed emphasis on the need for reading and writing skills.

In addition to the need for literacy, the rapid growth of technology will require extensive retraining. Martin Binkin, in Military Technology and Jobs Skills, documented that not only will the number of technical jobs increase in the future, but the technical complexity of specific jobs will also grow. Binkin's technical

complexity example relates that the percentage of clerical positions has remained relatively the same; however, the clerks filling the clerical positions now must have data processing skills.

The trend toward an increased number of technical jobs and the technical complexity of specific jobs is predicted to continue. The Air Force 2000 study concluded:

The expanded operational environment of the future will create an increased demand for people in command, control, and communications, in electronic warfare, in computer-assisted design/manufacturing, and in space operations. Although automation and "Black box technology" will continue to offset some task complexity, an intensified need for more technically trained workers to operate and maintain complex systems is inevitable. (56:253)

The AF 2000 Study conclusion, when combined with Binkin's view of the complexity of specific jobs, has a possible significant impact on the Air Force. The possibility is that a group of jobs clustered by level of technical difficulty and advances in technology may require a more qualified work force. "Thus even if the number of electronic jobs remained fairly constant, those jobs arguably could be more demanding and require individuals with a higher degree of proficiency." (8:39)

The increase in technical jobs and complexity of jobs is a concern of senior AF leaders. Secretary of the Air Force Verne Orr stated in Air Force magazine:

...The requirement for a scientifically literate citizenry, able to master the implications of the new technologies, grows ever more important. Indeed, our nation's very technological advantage in defense and the future ability of our economy to compete in world markets may eventually be at stake.

...The declining ability of American young people to handle math and science will handicap the technology-oriented Air Force of tomorrow unless action is taken today. (36:73)

The AF NCO will be the supervisor who must train, and with the rapid advances in information systems and military technologies, retrain the junior NCOs and airmen. The training task is a large process in the AF. The technical training requirement for the enlisted force in 1986 was 268,000 airmen and NCOs. (1:--) This figure does not include on-the-job training and retraining on new equipment. The training responsibilities of the NCO will be complicated by a reality of today: the declining trend in the American education system.

In 1982, 23 million Americans, 1 in 5 adults, lacked the reading and writing skills needed to cope with the basic demands of daily living. Another 30 million Americans are marginally capable of being productive workers, while thirteen percent of high school graduates have only sixth grade reading and writing skills. (61:53)

Today, the level of education desired in America for the general population is described as "functional literacy." This refers to the reading and writing skills needed to participate in a society of increasingly complex

tasks. Recent studies indicate that functional illiteracy is spreading. For example:

A person now needs to read at a sixth grade level to understand a driver's license manual, at an eighth grade level to follow the directions for preparing a TV dinner or to read a federal income tax form, at a 10th grade level to interpret the instructions on an aspirin bottle, at a 12th grade level to understand an insurance policy, and at college level to figure out the meaning of an apartment lease. By those measurements, say experts, more than half the adult population could be considered functionally illiterate, depending on the task. (61:54)

The significance of functional illiteracy was reinforced by the following statement from the director of education for the AFL CIO: "By the 1990s anyone who does not have at least a 12th grade reading, writing and calculating level will be absolutely lost." (61:54)

Functional illiteracy in the United States is highest among minorities. Functional illiteracy for whites is sixteen percent, compared to fifty-six percent for Hispanics and forty-four percent of blacks. A final trend indicates that women are more likely to be functionally illiterate than men, and a higher proportion of illiterates are likely to be residents of rural areas. (61:51-55)

According to a 1982 US News and World Report article, the number of illiterates in America is steadily mounting. The increase is linked to nearly 1 million school dropouts a year and also to immigrants from Latin America and Asia, many of whom are unable to read or write in English or their own language. (61:53) The NCO at the turn of the

century may have to train an increasing number of functionally lower capable airmen for increasing technical jobs and increasing complexity within jobs.

The second megatrend that Naisbitt offers is "forced technology - high tech/high touch." This movement translates into the need for more human touch as technology is forced on the American society. As the society becomes more involved in technological advances--in the workplace and in the home--there is a greater need for personal contact or in Naisbitt's words, "high touch."

A recent Business Week article, "Management Discovers the Human Side of Automation," relates that technological improvements alone do not increase productivity. The main point of the article is that workers are required who, working in small groups (high touch), desire challenging jobs and seek responsibility. These workers will have to be multiskilled, combine doing and thinking on the job and prefer small autonomous work groups. (28:71) This trend in the civilian work force is significant when combined with the fact that "...the percentage of technical jobs in the military's enlisted ranks is almost twice as large as the proportion of technical jobs in the entire civilian economy." (8:9)

The NCO will be involved daily in the changes that technology will bring. The NCO will have to help the airmen and DOD civilian workers adjust to change. The

"high touch" required will demand the NCO be adaptable to change and aware of the pressures placed on his subordinates...and the human, personal attention they will need.

A world economy replacing a national economy is the third trend. This shift has two important influences on the environment the NCO will have to lead and manage in: first, the interdependence that will be forced on the U.S. with the trend from national to a world economy, and second, a society that is no longer the world's dominant force, but part of a growing number of economically strong countries. (41:57)

For the NCO in the year 2000 this will result in an AF environment where some equipment, software, training devices and institutional trends could be from other countries. It may be difficult for the airmen and DOD civilians to adjust to this situation. The NCO will be the first-line supervisor who will have to accommodate to the change.

The next trend is a shift from short-term considerations and rewards to an acceptance of thinking and doing things in much longer time frames. In the business world, this will be a shift from short-term profit to long-range growth and increases in productivity. In the Air Force it will be a shift from a two year budget cycle to a vision of the future.

History provides many examples of the importance of vision. For the military, trends have a national defense significance: horse to tank, battleship to aircraft carrier, and artillery to missiles. Historical trends have started at the grass roots level of society and worked upward. (41:3) The NCO as the AF first-line supervisor will be the "nerve endings" of AF leadership and must be ready to see, understand, and help focus on the new trends.

The move from centralization to decentralization is the fifth megatrend. This growth of decentralization is related to the shift from an industrial society to an information society. According to Naisbitt:

America's industrial machine was probably history's greatest centralizing force. The mechanical blueprint of industrial society required enormous centralization--in labor, material, capital, and plant. This is because mass industrialization was organized according to the principles of economies of scale, that is, the more you produce in one place, in one way, the cheaper each individual unit will be. (41:98)

The AF has in the past also emphasized centralization. The January, 1987 issue of INC magazine features an article on how Gen William L. Creech (USAF/Ret.) dramatically increased Tactical Air Command (TAC) combat readiness through decentralization. General Creech's decentralization philosophy, simply stated, is "things are achieved by individuals, by collections of twos and fives and twenties, not collections of 115,000. And that's as true in industry

as it is in the military." (20:51) Whether the thrust is on saving money or increasing combat readiness, General Creech believes the thrust is on people. The AF leader who is the focal point of the "twos and fives, and twenties" is the NCO. This philosophy is shared by the Chief of Staff of the Air Force, General Larry D. Welch. He stresses that decisions and responsibility must be decentralized from higher headquarters, when possible, to the first line supervisors who are daily making decisions. (1:--) General Welch believes with decentralization goes accountability for actions and decisions. The NCO will be more and more accountable as the AF program for decentralization continues.

Other experts have expressed the "excitement" that decentralization can bring to workers and managers and leaders. One such expert is John W. Gardner, a contributor to the Leadership Studies Program. In an article entitled "The Moral Aspect of Leadership", Gardner stated:

We need leaders in our organizations and in the nation who can bring alive the whole down-the-line network of individuals with that kind of capacity to share the leadership task. Such a network will enliven and strengthen our society at every level. Problems visible only at lower levels (or solvable only at those levels) will be seen and solved there. In the case of problems solvable only at a higher level the search for solutions at that level will be facilitated by the availability of grassroots diagnosis. (22:18)

As the future unfolds, the NCO will be part of the change and innovation in a decentralized society and AF.

The NCO's leadership and management expertise will be the tools that unlock the potential of the airmen and DOD civilians at the turn of the century.

The sixth trend of institutional help to self help is a trend away from relying on government and other institutions to a more traditional American value of self-reliance. As Naisbitt relates, for decades institutions in America, such as government, corporations, and the school system, were buffers against life's hard realities. The needs that were satisfied included food, housing, health care, and education. Slowly during the 1970's, Americans began to disengage from the institutions that had disillusioned them and began to relearn the desirability of doing things on their own. In a sense, America has "...come full circle. We are reclaiming America's traditional sense of self-reliance after four decades of trusting in institutional help." (41:131)

The AF NCO will be involved daily in a self-help society with the airmen and DOD civilians he/she supervises. The AF has a tradition of "look after its own" AF units view themselves as families. Thus, the societal trend of self-help is a move toward an AF society norm. However, the NCO will have increasingly complex problems to help his/her people solve. As Alvin Toffler's Future Shock predicts, "...millions of ordinary, psychologically normal people will face an abrupt collision with the future..."

many of them will find it increasingly painful to keep up with the incessant demand for change..." (54:8) The NCO will be the leader who will have to deal with the emotional highs and lows of the airmen, DOD civilians and their families as they face the demands of change.

The next trend, from a representative to a participatory democracy, is more than just an involvement in the governmental process. It is a basic movement toward more actively participating in decisions that effect one's life. Within the civilian business and political arena, according to Naisbitt, "leadership involves finding a parade and getting in front of it; what is happening in America is that those parades are getting smaller and smaller--and there are many more of them." (41:162)

This trend is documented in America today and it is called participatory management. This approach stresses responsibility among all employees and encourages them to participate directly in decisions that relate to work. (48:69) This system does not take away a leader's responsibilities; instead it enables the leader to be a facilitator in the process of change by being a channel for innovative ideas from the workers.

The NCOs will still make decisions and give orders. However, the decisions and orders will be based on information and ideas from the doers...the airmen and DOD civilians.

The eighth trend is a move away from hierarchies to networking. According to Naisbitt, simply stated, "...networks are people talking to each other, sharing ideas, information, and resources." (41:192) Hierarchies remain; however, America's belief in their efficiency does not. The failure of hierarchies to solve America's social, business, and political problems forced people to talk to one another--and that was the beginning of networks. (41:191) The importance of networking is not the network itself or the finished product, but rather the sharing of information between people and groups of people. (60:101)

Networking will impact on the NCOs of the future. NCOs can network with each other in order to share problems and solutions to their jobs and to the people aspects of their jobs. Also, with the understanding that the first-line supervisors have current information on specific aspects of the AF mission, line and supervisory NCOs may be networked by senior leaders for information and/or ideas.

Reinforced by the 1980 census, Naisbitt next discusses the North-South trend--or the trend that for the first time in the history of America there are more people in the West and South than in the North and East. The possible effects this trend might have on the NCOs of the year 2000 are significant.

One impact could be a lack of jobs for military and family members at AF bases in areas of stagnant or declining growth. The quality of life of airmen and their families could suffer from low quality schools and lack of extracurricular activities sponsored by the local community in areas of declining growth. On the other hand, the NCO at an AF base in a rapidly expanding area could face problems associated with a limited supply of affordable housing and overcrowded schools.

The final megatrend is a move away from an either/or to a multiple options era. Naisbitt uses the analogy of a "Baskin-Robins Society" --that is everything comes in at least 31 flavors. (41:232) Across American society, the desire for multiple options is redefining the way people work, the hours worked and the recreational activities available. Specific examples include quality work circles; full-time, two-career-family employees; job-sharing; job-splitting; and a dramatic increase in leisure time specialty services such as jazzercise.

The NCO at the turn of the century will lead airmen and DOD civilians that live and have matured in a multiple choice world. The challenge to the NCO in a multiple choice future will be to constantly attempt to rid his/her thinking of preconceived beliefs, biases, thinking ruts, and unchallenged assumptions in order to lead from a changing present to an uncertain future. (48:40)

In summary, the megatrend model reflects that today's NCO is living in a "...time between eras." America has not fully moved on from a centralized, industrialized and economically self-contained society. The NCO at the turn of the century will be part of the future.

That future will include a move to an information society with a population shift to the Southwest. Americans will participate increasingly more in government, business and social decisions. This move to decentralization of authority will be accompanied by an increased self-awareness and self-reliance by the American public. Megatrends provided a frame of reference for the direction of change within the American society. The next chapter focuses on a roadmap of future change for the AF.

CHAPTER FOUR

It is a fundamental premise of this study that we have entered a period of profound political, economic and technological change calling for adjustment within our military establishment. Problems that could in past years be conveniently postponed now demand immediate attention.

AF 2000 Study

AIR FORCE CHALLENGES IN THE YEAR 2000

The purpose of the AF 2000 study was to make a realistic assessment of the challenges likely to confront the Air Force at the turn of the century. The study focussed on seven important issues: war-fighting perspective, leadership and military values, compensation, manpower requirements, recruiting, training, and retention. Each of these issues in the AF 2000 model will be discussed in detail.

The first issue is the war-fighting perspective. The AF 2000 stated:

Reliance on technology, in the relative security of a peacetime setting, has not only depersonalized war, but also has served to fragment traditional military values by placing more emphasis on the individual. These factors have diluted the generally perceived importance of leadership, rank, and combat experience. The most significant and decisive impact of the gradual shift away from a war-fighting, mission orientation has been the loss of the perception that success in battle ultimately depends on trained, dedicated, and motivated people. (56:268)

This trend is evident in most AF wings. A typical Air Force flying wing has four to five thousand military and

DOD civilian personnel, but only 300 to 400 aircrew members would be directly involved in fighting the enemy. The AF 2000 study stated that:

Although formal programs certainly help, a true war-fighting spirit and sense of purpose will evolve only through a re-emphasis of unit cohesion, pride, and spirit together with a renewed appreciation for the basic military values of leadership, team work, positive discipline, and a selfless dedication to duty to one's country. (56:269)

This AF direction to maintain a war-fighting spirit has considerable implications when one thinks about an NCO's responsibilities for supervising airmen and DOD civilians. As the AF first-line supervisor, the AF NCO of the future will be daily emphasizing unit cohesion, pride, and spirit and instilling the values of team work, discipline, and dedication.

The second 2000 issue is leadership and institutional values. Morris Janowitz, in The Professional Soldier: A Social and Political Portrait, stated, "The impact of technological developments during the last half-century has had the consequence of "civilianizing" the military profession and of blurring the distinction between the civilian and the military." (30:2-18) The "civilianizing" of the military has been viewed as a shift from a "military institution" to a civilian-like occupation. According to Charles C. Moskos, Jr.:

An institution is legitimated in terms of values and norms, that is, a purpose transcending individual self-interest in favor of a presumed higher good. Members of an institution are often viewed as following a calling; they generally regard themselves as being different or apart from the broader society and are so regarded by others. (39:1-118)

Moskos defines an occupation as: "legitimated in terms of the market place, that is, prevailing monetary rewards for equivalent competencies." (39:1-19) Moskos and other writers point out that in reality the Armed Forces have had and will most likely continue to have elements of both institutional and occupational characteristics. Moskos described a "pluralistic military in which some parts are divergent and others convergent with respect to civilian society." (32:1-10) As the AF 2000 study states, the goal is to maintain as many of the "institutional" characteristics of the AF as possible while trying to limit the movement toward "occupational" values.

The NCO at the turn of the century will be the "maintainer" and the reinforcer of the institutional values of the AF. The NCO will be responsible for transmitting to the airmen and DOD civilians the essential and enduring values of the military institution. As documented in AF 2000 study, the four essential and enduring values in the military institution are:

(1) Loyalty to the Institution. The Air Force exists solely to serve and defend the nation. To achieve that goal, members must direct their loyalties upward through the chain of command, accept as proper their constitutional accountability to civilian control, and agree to adhere to the spirit and letter of lawful orders. They commit themselves to work individually and collectively toward institutional goals, and remain obedient and disciplined even in the face of difficulty or danger.

(2) Loyalty to Unit. In demonstrating loyalty to the institution, Air Force members must also demonstrate a reciprocal loyalty, a two-way obligation, between those who lead and those who are led. They must consider the welfare of their comrades, recognize the necessity for mutual dependence, and strive for the cohesiveness and loyalty that mold individuals into effective fighting organizations.

(3) Personal Responsibility. As elements of fighting organizations, individual members incur the obligation to accomplish all assigned tasks to fulfill all commitments to their comrades, and to actively work toward strengthening their individual capabilities. The members incur the further obligation of accepting full responsibility for the actions of those they command or supervise.

(4) Selfless Service. In a profession where life is ultimately at stake, there can be little tolerance for motives of self-interest or personal gain. Each individual must subordinate desires for self-interest and self-aggrandizement to the larger goals of mission accomplishment, unit spirit, and sacrifice. Service in the military requires teamwork in its fullest and most literal sense -- teamwork that unfailingly emphasizes the collective and greater good of the institution. (56:271)

The third issue is compensation. "Military compensation is one of the most important factors affecting the Air Force's ability to meet manpower requirements needed to operate, maintain, and support the AF of today and in the future." (56:274) The NCO will perform an important

role for the AF in the area of compensation. Specifically, the NCO will be responsible for keeping the "troops" informed of the initiatives of senior AF leadership to maintain predictable, comparable and stable compensation. The NCO will also provide important feedback on the compensation needs and desires of the airmen and DOD civilians to the senior AF leadership.

Compensation is important because it pervades all aspects of AF life--and the NCO as the first-line supervisor will be most personally involved in discussing this issue with AF men and women.

The next 2000 issue is manpower requirements. As the study points out, "...increasing sophistication of technology will be a fundamental element driving manpower requirements in the future." (56:277) There are many pressures that will affect the manpower pool the NCO of the future will work with, such as: (1) Due to demographic patterns, America is "aging" and there will be a sharp decline in the number of youths in the labor force. (7:vii) The decline in size of the 16 to 24 year old age group will increase the competition for young workers between the civilian sector and the military. (2) "Women will account for 60% of the total growth in the labor supply to 1995. This reflects both growth in the female population and their increased participation and their increased rate of participation in the work

force." (50:118) The NCO of the future will have to understand the collision of two powerful social forces. One is the push for women's equal rights, the other the deeply rooted traditions that question the propriety of women under arms. (9:109) (3) Blacks in the military: "The 410,000 blacks under arms in 1981 represent about 20 percent of all military personnel, a proportion far greater than the 11 or 12 percent of the total population that is black." (5:vii) One study, Blacks and the Military, contends that as the number of young Americans declines, blacks will constitute an increasing proportion of the smaller supply pool. Due to economics, many blacks may find military service even more inviting than in the past. (5:157) "Manning the armed forces with a representative cross section of American society would be no mean task." (5:157) The NCO will have to lead in this environment. (4) Military as a married institution: "One can estimate that the U.S. military has gone from being 35 percent married in the 1950s to being approximately 60 percent married in the 1980s." (36:1-91) Studies have shown that 67 percent of enlisted men's wives work at least part time. The NCO will have to adjust to this increasing trend. (5) In the future the AF will have "...an intensified need for more technically trained workers to operate and maintain complex systems." (9:253) This AF requirement exists in the environment

quoted below from a National Science Foundation study:

We appear to be raising a generation of Americans, many of whom lack the understanding and the skills necessary to participate fully in the technological world in which they live and work. (53:70)

The implication for the military is clear, as Martin

Binkin explains in Military Technology and Defense:

It means that a smaller proportion of prospective volunteers possess the background to be trained in technical skills that are becoming increasingly desirable for a range of military jobs. On top of this, the youth pool will be shrinking in size as the "baby bust" runs its course, and its composition will be changing as disadvantaged social groups, traditionally with lower aptitude scores for technical training, constitute a larger proportion of the youth population. (8:74)

The AF NCO at the turn of the century will be training these people.

The fifth issue is recruiting. By 1995, 55 percent of the "qualified and available" male youth population will have to enlist if the active and reserve forces are to meet projected recruit requirements. (10:90) Recruitment will be indirectly affected by the NCOs of the year 2000.

The NCO in his daily leadership role could positively influence airmen and DOD civilians on the desirability of service to the United States in the AF. The airmen and DOD civilians could then "network" with "available and qualified" youth to choose service to country through the Air Force. (NOTE: Page 116 of the All-Volunteer Force After a Decade points out that "available and

qualified" excludes college students beyond their second year and women.) (10:115-116)

Training is the next 2000 study issue. The AF 2000 study stated:

Rapidly changing technology and the rapidly decreasing currency of technical skills will require a shift to a more broadly trained generalists and require more refresher training, continuing education, and retraining." (56:283)

The requirement for refresher training and retraining was addressed by General John W. Roberts (USAF/Ret) in The All-Volunteer Force After a Decade:

...OJT (on the job training) can be an extremely "high-cost" option because it requires the individual unit to utilize its most experienced personnel for the training function, while at the same time drawing NCO experience away from the primary unit mission, with a possible negative impact on overall unit readiness." (10:158)

The AF 2000 study states "the greatest challenge to Air Force training will be, as always, to provide the degree of military, technical, and operational training necessary to ensure success in combat." (56:284) The NCO of the future will be intimately involved in training the force.

Retention is the last issue. The AF 2000 study states:

Future conflicts will not allow long lead times in which to mobilize and train a force. The retention of trained and experienced people will thus be one of the crucial readiness challenges for the future. (56:286)

A paper by C. Robert Roll, Jr., and John T. Warner entitled "The Enlisted Career Manpower in the All-Volunteer Force"

revealed some first term enlisted retention trends that will impact on the future role of NCOs. (10:52) Roll and Warner's findings indicate:

(1) Higher mental group personnel and more highly educated personnel re-enlist at a lower rate than others.

(2) Married personnel re-enlist at a higher rate than single personnel.

(3) Nonwhites re-enlist at a somewhat higher rate than whites.

Roll and Warner also examined two studies on the effect of service-specific factors (i.e., which branch of the service is selected) on retention. Their findings indicate that:

Taken together, these studies suggest that the retention effects of service-specific factors are minor relative to the impact of changes in pay and unemployment. Further, they suggest that the services are not likely to be able to improve retention rates significantly by altering such factors as the extent of sea duty or the length of overseas tours, at least not within the feasible range of adjustment of these controls. The major policy implication of this research is that the compensation system is, and will remain, the major tool for controlling retention. (10:62)

A conclusion that was reached was that certain "random components" influencing retention rates do exist. These random components incorporate certain factors that are difficult to measure such as morale, leadership, public attitudes toward military service, and involvement in a popular or unpopular war. (10:62) While the above studies conclude that pay and the unemployment climate of the

national economy are the two most significant retention variables, the role of the NCO as a leader in the "random component" area could be a deciding factor on the retention of quality airmen and DOD civilians.

Charles Moskos has expressed concern with a retention or recruitment program that emphasizes pay or cash inducements has filled the armed forces with "too many deprived youths, many with dependents, who view the military in terms of an occupation rather than a calling."

(4:59) If Moskos is correct that pay and cash inducements are attracting occupationally motivated individuals who serve primarily for compensation, then the future NCO will be challenged to instill and maintain the "institution/calling" motivation of service to country over self interest.

In summary, through the year 2000 the AF will be influenced by dynamic social, economic, demographic and technological trends that will alter the way the mission is performed. At the same time the AF will be pressured by continued constraints on people, money, and resources.

(56:290)

As the AF moves toward the 21st century, the AF 2000 study places great importance on instilling a war-fighting orientation, developing strong and dynamic leadership, and perpetuating institutional values. The NCO at the turn of the century will perform a significant

role implementing the recommendations in the AF 2000 study.

The Megatrends model and the Air Force 2000 model provided the framework within which the NCO at the turn of the century will serve. In chapter five, the results of the view into the future and the role the NCO will perform are presented.

CHAPTER FIVE

The culture shock phenomenon accounts for much of the bewilderment, frustration, and disorientation that plagues Americans in their dealings with other societies. It causes a breakdown in communication, a misreading of reality, an inability to cope. Yet culture shock is relatively mild in comparison with the much more serious situation, future shock. Future shock is the dizzying disorientation brought on by the premature arrival of the future.

Future shock is a time phenomenon, a product of the greatly accelerated rate of change in society. It arises from the superimposition of a new culture on an old one. It is culture shock in one's own society. But the impact is far worse...most travelers, have the comforting knowledge that the culture they left behind will be there to return to. The victim of future shock does not.

Future Shock

FINDINGS

As stated in chapter one, the author believed that the role of the NCO would remain relatively the same through the year 2000. The NCOs at the turn of the century would perform basically the same functions and jobs as they do today. If there was a change, the change would be in the "tools" used by the NCO.

The new tools used by NCOs might be different in each area of NCO responsibility. Examples include:

- Technician: Instead of using a screw driver or welding gun, a laser pen or computer-assisted scanning device could be the tool required on the flight line.

- Manager: While "Management-by-Objective," may be valid today, at the turn of the century, NCOs could be

involved in military adaptations of "Quality Work Circles" and "Confrontation Meetings."

- Leadership: Leadership by example is a style purportedly practiced by many NCOs today; however, by 2000 situational leadership in leaner, more horizontal organizational structures may be the primary leadership style of the NCO.

Based on the literature search and research in chapters two, three, and four the author became aware of a possible unique role for the AF NCO at the turn of the century. The idea was contained in the title of this paper...the changing role of the AF NCO. The author had not previously focused on the term "role." The author's original focus on the term "role" included a preconceived definition. That definition dealt with specific skills or jobs the NCO performs today and would be required to perform in the future. However, The American Heritage Dictionary of the English Language provided the author two different meanings to the word "role": "1. A character or part played by an actor in a dramatic performance. 2. The characteristic and expected social behavior of an individual. A function or position."

The dictionary definition of the word "role" unlocked for the author the significance of the information acquired during the literature search. Both the Megatrend Model and the Project 2000 Model prediction of the U.S.

and AF environments at the turn of the century emphasized the need for new tools. At the same time, the literature search and research revealed that the significant aspect of the future for the NCO is...change. The tools will be different. However, the changes within society and the Air Force will exert the major influence on the role of the future NCO...not the new tools. The author's research revealed that his original hypothesis was largely incorrect. The role of the NCO of the future will be different than it is today. The role of the AF NCO of the future will be to help the airmen and DOD civilians they supervise adjust to change within society and the AF.

Change is not a passive experience. The American Heritage Dictionary defines change as: "1. To cause to be different; alter. 2. To give a completely different form of appearance to; transform." Change brings both threats and opportunities. As Toffler points out in Future Shock and Naisbitt relates in Megatrends change can bewilder and disorient people and societies. There must be some glue that holds independent work units--be they individuals, sections, or squadrons--together. According to the authors of Corporate Cultures, that glue is a culture. (17:193)

Corporate Cultures uses the Webster New Collegiate Dictionary definition of culture, which is: "The integrated pattern of human behavior that includes thought,

speech, action, and artifacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations." A more informal definition of culture offered in the book is "...the way we do things around here."

Corporate Cultures research revealed that every organization has a culture. The authors state:

Whether weak or strong, culture has a powerful influence throughout an organization; it affects practically everything--from who gets promoted and what decisions are made, to how employees dress and what sports they play. (17:193)

A strong culture is a powerful influence for guiding the behavior of people and it helps them do their jobs better. In Corporate Culture, Deal and Kennedy state the organizational or corporate culture consists of five elements. (17:13) These elements are the values, the heroes, the rites and rituals, the cultural network, and the business environment. (17:13-15) Each of the five elements are described as follows:

1. Values: This is the core element of the culture. These are the foundation beliefs and concepts of an organization. In some organizations the values that are the essence of the organization show up in phrases that reveal the essence of the organization. Examples include DuPont's, "Better things for better living through chemistry" and Caterpillar's, "24 hour parts service anywhere in the world." The people in these organizations deeply believe

these sayings...They are more than just slogans. They are the foundation of the organization.

2. Heroes: "If values are the soul of the culture, then heroes personify those values and epitomize the strength of the organizations." (15:4) The heroes are real life success stories within the organization. Heroes prove the values are valid and achievement within the organization is possible and attainable. Heroes and their stories that become legend perform many other roles for the organization, such as role model, motivator ...symbolic of the company values, and model for success. (15:4)

3. Rites and Rituals: "These are the systematic and programmed routines of day-to-day life in the company." (17:14) These routines can range from daily work schedules to special ceremonies organized to reward those in the organization that live or typify the values of the organization. Deal and Kennedy believe the best run organizations spend a lot of time on rituals. Rituals provide special opportunity to create, recognize, and add to the folk-lore of the heroes...real people that live or have lived the values of the organization.

4. The Cultural Network: This network depends on people's "second jobs." These are additional responsibilities not covered in a wiring diagram or job description. These second jobs are part of the informal

communications of the organization. This system is described by some as the "grapevine". Deal and Kennedy label it the cultural network. This informal network carries information important to the culture, such as stories of heroes, examples of the organizational values, explanations of rites and rituals...along with positive and negative organizational gossip. The cultural network is the hidden hierarchy of an organization and must be understood and appreciated by the leaders of the real organizational structure. "In strong cultures, networks carry the beliefs and values that keep the culture alive and shared across levels and divisions, and among people." (15:6)

5. The Business Environment: "The biggest single influence on a company's culture is the broader social and business environment in which the company operates. A corporate culture embodies what it takes to succeed in this environment." (15:6) The bottom line is that the environment the organization exists in determines what the organization must do to be a success.

Organizations are human institutions; they are made up of people. They excel and achieve their organizational goals based on the people that make up the organization. Deal and Kennedy provide a convincing study which stresses that organizations with strong cultures succeed because the people within the organization

believe they are special. As change disorients and bewilders some, in the best organizations the "glue" that holds the people together is the corporate or organizational culture...consisting of values, heroes, rites and rituals, the cultural network, and the business environment. (17:193)

It is important not to be distracted by the "business world" terms used by Deal and Kennedy in Corporate Cultures. In their model, they use examples and terms from the civilian sector. However, the concept is as valid for the government and military sector as it is for the private sector.

The significance of corporate culture to the AF is to understand the advantage gained by using the strengths of the culture concept. Deal and Kennedy use terms such as heroes, rites, rituals--in the AF we have heroes, ceremonies, traditions. In a real sense military organizations have always had the equivalent of a corporate culture. As the AF moves into the 21st century, the importance of understanding corporate or organizational culture becomes significant because of the tradition of success that characterizes organizations with a strong culture.

Organizations that have nurtured their identities by shaping values, making heroes, spelling out rites and rituals, and acknowledging the cultural network have an

advantage. (17:15) These organizations have firm values and beliefs to pass along, not just services or products. They have beliefs to share and stories to tell, not just things to do or profits to make. These organizations are not managed by faceless bureaucrats but are led by heroes, whom managers and workers believe in and try to emulate. Organizations with strong cultures are human institutions that provide real meaning for their people--both on and off the job.

A strong culture is a powerful force for establishing and maintaining desired behavior. It helps people within the organization perform their jobs a little better, according to Deal and Kennedy, in two distinct ways:

First, "A strong culture is a system of informal rules that spells out how people are to behave most of the time." (17:15) This translates to the people knowing what is important--values--within the organization and thus knowing what is expected of them. In a strong culture, employees (airmen) will waste little time in deciding how to act in a given situation, while people in a weak culture waste a good deal of time trying to determine what and how they should do things. "The impact of a strong culture on productivity is amazing. In the extreme, we estimate that a company can gain as much as one or two hours of productive work per employee per day." (17:15)

Second, "A strong culture enables people to feel

better about what they do, so they are more likely to work harder." According to psychologist Frederick Herzberg, workers today are confused. They feel cheated by their jobs and they fill their lives and their time with outside interests. Unlike workers of over twenty years ago, today's workers' life values are uncertain. (17:16) Herzberg believes that uncertainty is at the core of the confusion of today's workers. But, in organizations with a strong culture, to a great degree much of the workers uncertainty is removed. This happens because strong cultures "...provide structure and standards and a value system in which to operate." (17:16)

Deal and Kennedy's culture concept comes down to values...standards...and understanding the importance of working with people in any organization. The role of the NCO in the future...at the turn of the century... will be to help airmen and DOD civilians adjust to change. The NCO of the future will perform this role by continuing to work with AF people...and be the "keeper of the Air Force culture." The "tools" the AF NCO will use in the future could include the ones used today such as leadership skills, management techniques, technical expertise, and acceptance of responsibility. Some of the NCO's other "tools" may be new to the AF such as quality work-circles, flex-time shifts, and tiger teams of generalists and specialists that support more than one base or

operating location. However, the role of the NCO--the part played--the expected social behavior performed by the NCO will take on new importance.

The 21st century AF NCO, in order to help AF people adjust to change, will be the maintainer...the teacher... and the transmitter of the Air Force values, Air Force heroes, Air Force rites and rituals, the Air Force institutional network, and the Air Force war environment. The AF NCO will be the "keeper of the Air Force culture."

The AF has provided the NCO with a framework for the AF culture. The AF framework is "Project Warrior." A former Chief of Staff of the Air Force, General Lew Allen stated:

Project Warrior was formulated to create an environment where our people can learn from the warfighting lessons of the past and use that knowledge to better prepare for the future. I believe that a continuing study of military history, combat leadership, the principles of war and particularly the application of airpower is necessary for us to meet the challenges that lie ahead. (42:2)

General Allen's words have been translated by AF people in the field. In a 1983 Airman magazine, the two objectives of Project Warrior were defined as:

1. Improve the fighting spirit and the perspective of Air Force people about the mission and their role in it.

2. Reach an improved understanding of the theory and practice of war--especially airpower's role. (21:15)

When Project Warrior and other aspects of the Air Force way of life are compared to the corporate culture model there is a strong relationship. Using the five elements of the corporate culture model as a reference, the AF institutional culture can be observed and documented.

1. Values: These are the basic concepts and beliefs of the AF. "...This nation is worth protecting. It's worth fighting and risking your life for." (21:14) This is the warfighting spirit of the Air Force.

2. Heroes: The role models in the AF are many. Legends like Mitchell, Arnold, LeMay are plentiful. There are also the Air Force officer and airman Medal of Honor winners and the wing and squadron heroes that are working within their organizations daily epitomizing the strength and the values of the Air Force.

3. Rites and Rituals: The daily work rites are numerous in the AF. They range from the security police inspection prior to assuming mission responsibilities to air crew mission briefings prior to flight. The rituals that acknowledge and reward those who epitomize AF values are steeped in tradition. They include promotion and award ceremonies, induction into the NCO Corps, and Change of Command ceremonies and retirements...all of which anoint heroes for being the embodiment of AF values and beliefs.

4. The Cultural Network: The hidden hierarchy or grapevine provides needed communication upward and downward and across the Air Force. This network translates and legitimizes the values, heroes, rites and rituals of the AF. It also enables trends that are created within the AF institution to be brought to the attention of the senior AF leadership. Feedback serves as a "checks and balances" mechanism. (60:180)

5. The Business Environment: The environment in which the AF must perform its mission is war. The AF embodies what it takes to succeed in war. The AF's values, heroes, rites and rituals, and institutional network create the environment that encourages and allows its warriors, officers, NCOs, and airmen to prepare for war and to win, if required to fight. This environment includes, as General Allen stated, the "...continuing study of military history, combat leadership, the principles of war and particularly the application of airpower...." (42:2)

The NCO, as was discussed in chapter two, is the AF first-line supervisor. He is the AF institutional representative that daily embodies AF values and beliefs. The NCO is the maintainer of the rites and the institutional "passer on" of rituals, legends, and war stories that maintain the essence of the warrior spirit. The informal AF communications network is kept honest and accurate by the NCO. NCOs will keep the flow of information

moving up, down, and across the AF and they maintain the combat-ready "environment" of the airmen.

Former President Harry S. Truman once said:

Remember who you are.
Remember where you came from.
Remember where you're going. (60:240)

President Truman's words capture the essence of corporate culture and Project Warrior. The NCO will be on the front line of reminding the airmen who they are (values) and where the Air Force came from (heroes, rites and rituals) and will help lead them where the AF is going.

Chapter six is an epilogue. It provides examples of the actual workings of corporate culture within large, complex organizations. Chapter six also contains a discussion of areas of training that might help prepare the NCO of the future to deal with change and be the keeper of the Air Force culture.

CHAPTER SIX

The institution builders of old knew the value of a strong culture and they worked hard at it. They saw themselves as symbolic players-actors in their corporations. They knew how to orchestrate, even dramatize events to drive their lessons home. They understand how corporations shape personal lives and were not shy about suggesting the standards that people should live by. If we are to have such great institutions tomorrow, the managers of today will have to take up this challenge again.

Corporate Cultures

"Anyone can hold the helm when the sea is calm"

Ancient Philosopher (47:174)

EPILOGUE

The author has defined the future role of the AF NCO and the theory of corporate culture has been documented. The scope of this study was to determine the changing role of the AF NCO. The author has defined the future role of the AF NCO and that role within corporate culture has been detailed. The research for this study has highlighted two additional areas beyond the changing role of the AF NCO that the author believes should be discussed:

First, a brief look at two examples of corporate culture in America in 1986 and how they work; then, an overview of same areas that NCOs of the future should be aware of in order to perform their new role.

The two corporate culture examples are Ford Motor Company and General Motors (GM). In 1980, Ford Motor

Company was a billion dollars in the red for that year. Ford's management believed the company was "...out of touch with its employees, and worse, its customers. Ford builds bland cars. Quality is an afterthought." (23:64) Ford's plan to get out of the red was to change everything. They would "find a less destructive way to manage, design a whole new car that will bring customers back into the showrooms, learn how to build quality cars." (23:64)

Ford had to change its shortsighted management creed of cutting costs or increasing prices. Ford elected to rebuild a positive corporate culture. "For Ford, overhauling its corporate culture wasn't an exercise in idealism: it was a way to produce cars more cheaply." (23:64) And Ford's cultural change appears to have been successful. In 1986, six years after initiating its cultural change, Ford earned one billion dollars in profits. (23:64) Also, for the first time since 1924 Ford earned more profits than its rival, General Motors Corporation.

(NOTE: While corporate culture has had some effect on Ford's profits, other factors such as market conditions, gas prices, and operating results also must be considered when quantifying Ford's profits.) (23:66)

How has General Motors (GM) responded to Ford's profits?--by changing their corporate culture! GM Chairman Roger B. Smith "...has been trying radically to reshape

GM's corporate culture..." (62:84) Smith views GM as a bureaucracy that discourages risk-taking and is slow at decision-making. Smith has even distributed "culture cards" to GM executives so they can carry them in their pockets in order to remind them of their new culture mission. (62:84) A typical card says:

The fundamental purpose of General Motors is to provide products and services of such quality that our customers will receive superior value. Our employees and business partners will share in our success, and our stockholders will receive a sustained, superior return on their investment. (62:85)

Two positive cultural change indicators thus far at GM are: (1) The corporation is making more decisions based on long-term considerations instead of the traditional preoccupation with short-term results. (2) Managers are granted "permission to fail" in order to encourage initiative. (62:85) GM has elected to stick with its new corporate culture in order to turn its core business around and regain market share and profitability. (62:85)

Corporate culture is not just adaptable to the automotive industry. John K. Clemens, a professor of management at Hartwick College, in a 1986 article on corporate culture, pointed out:

Whether ancient Athenians threatened by Spartan assault, modern automakers tormented by the Japanese, or computer designers trying to capture the next leading edge technology, people need to be reminded of what their organizations stand for and what makes them worth fighting for.

Smart executives are becoming as concerned about their organization's culture as they are about next quarter's earnings. The reason is simple: They realize it affects the bottom line. (13:164)

Recent writings on corporate culture point out that it is not surprising that the current culture interest in the U.S. comes from "...America's most feared and respected trading partner-Japan." (14:10) Perhaps, learning from the Japanese, the most important implication of corporate culture is a new relationship between people and work. "Organizations which succeed in creating internal cultures integrate the most important values of the individual with those of the organization so that work becomes a means of self-fulfillment." (14:10) This theme of more human oriented cultures appears to be a dominant characteristic for organizations of the future.

This theme is visible in the change from the industrial era philosophy, when there was a belief that "...people, like parts, were interchangeable and standardized...", to the prevailing outlook today that, "...individuals are becoming less easily interchanged and more intrinsic to the business." (46:16) The emphasis within future oriented organizations places a premium on individuals and emphasis on thinking, innovation, and individual responsibility for decision making. (46:16) Corporate culture works and the emphasis of the successful cultures for the future is human oriented.

While the scope of this study was to determine the changing role of the AF NCO, the author's research revealed some areas that should be included in preparing NCOs for the year 2000. First, the NCO of the future must be prepared to lead in an environment of continuing change. Special emphasis should be placed on situational leadership. "A good manager and military leader recognizes that the situation determines the appropriate leadership style and that he may need to shift rapidly between various styles." (55:4-103) This approach is called situational leadership--and is based on the fact that "...real life situations are never static. They're in a constant state of change." (27:15) The NCO of the future should know and practice the skills associated with the situational leader model. (27:63)

Second, in order to deal with change in the future NCOs must be innovative. "The challenge is to create a human climate conducive to innovation in both public and private institutions." (18:203) Two of the most important aspects of what innovators do is to create and implement ideas. The NCOs can be taught to be innovative. According to Denis Waitley in Winning the Innovation Game:

Successful innovation, rather than resulting from genius or luck, is actually a learned and learnable process. Innovators aren't born knowing how to innovate; they gain the ability through conscious, directed effort and desire, and they figure out as they go along. (60:39)

The innovative NCO will be important in the future. For the innovator "...has the capacity not just for envisioning the future in an abstract, daydreaming, fantasizing kind of way, but has the interest and the capability and the drive to actually do something about the vision." (60:39)

Next, the NCO of the future will have to accept responsibility as it applies to information-based organizations. These type organizations can "...function only if each individual and each unit accepts responsibility: For their goals and their priorities, for their relationships, and for their communications." (19:206) Peter Drucker compares this type organization to a symphony orchestra. "All instruments play the same score. But, each plays a different part. They play together, but they rarely play in unison." (19:206)

Drucker points out that information-based organizations are not permissive, they are disciplined. Using the orchestra example, Drucker sums up organizations of the future as requiring:

Strong decisive leadership; first rate orchestra conductors are without exception unspeakably demanding perfectionists. What makes a first-rate conductor is, however, the ability to make even the most junior instrument at the last desk way back play as if the performance of the whole depended on how each one of those instruments renders its small supporting part. What the information-based organization requires, in other words, is leadership that respects performance but demands self-discipline and upward responsibility from the first-level supervisor all the way to top management. (19:207)

The fourth area that requires emphasis is participatory management, which is a "...nontraditional approach that develops responsibility even among entry-level employees and encourages them to participate directly in decisions governing work." (48:69) Whether called autonomous work teams, problem solving groups or quality circles, the emphasis is on involving all workers in the decision-making process. This approach has resulted in problems being solved at the activity level, and thus, freeing managers to concentrate on long-term strategies and the competition. (48:69) The bottom line from organizations that have changed to participatory management is that "...it improves worker satisfaction, it's good for our business, and helps us get the best ideas and creativity from our people." (48:69)

Next, the NCO of the future should be exposed to zero-defect management. This management philosophy is based on W. Edward Deming's belief that "quality is everyone's responsibility." (24:17) According to Deming:

...high quality can't be inspected in, added on, coerced, demanded, or achieved through exhortation. ("Quality is everyone's responsibility!") Rather, high-quality goods and services are the natural products of an organization that's working right. (24:18)

From Deming's viewpoint, "working right" means identifying everyone involved--workers, managers, suppliers--to solve problems and ensure quality at every level of work and management. Thus, if the zero-defect system

is accepted and implemented by everyone in an organization, mass inspection or mass quality control is a waste of time. (24:18)

Another area that NCOs of the future should be trained in is crisis management. Gerald C. Meyers, former Chairman of American Motors, in his book When it Hits the Fan points out that leaders can't plan their way out of crises; they have to learn how to manage them. Meyers goes on to point out that managers:

...need to accept a crisis for what it is--a warning that a turning point is near. Then, they can take action. The circumstances that led to the crisis should be carefully studied so that the same mistakes won't be made again. And the opportunities created by a crisis should be sought out even as damage control is under way. A lot can be done during a crisis that would be difficult or impossible to accomplish during a business-as-usual period. (38:5)

Meyers believes that managers should be trained to manage crises...not mismanage them. (51:2)

The next emphasis for NCOs of the future is sensitivity. John Clemens, Director of the Hartwick Humanities in Management Institute, believes that management is not a science; instead, he views the art of managing as the art of being human. (25:42) Clemens believes that "management is, at its essence, one of the humanities--that branch of learning that deals with the complexities of human thought and relationships." (25:42)

The NCOs in the year 2000 will have to be sensitive to the needs and aspirations of their people and be proficient in various counseling skills in order to help

their people through periods of rapid change and uncertainty.

In The Manager's Bible, Carl Heyel states it simply, "...people are the medium through which the manager must work. When the individual employee is all right, the department and the company are all right, too!" (52:4)

The NCO of the future will face many challenges. He/she will have to deal with rapid changes within the American society and within the Air Force. In order to maintain and pass on the Air Force culture, NCOs in the year 2000 will have to be exposed to new philosophies of management and leadership. These new areas include increased human orientation in the AF work environment; exposure to situational leadership, participatory management, zero-defect management, and crisis management; training in innovation skills; emphasis on acceptance of responsibility; and an increased sensitivity to the needs and aspirations of the airmen, DOD civilians, and their families.

Corporate Cultures provides the "bottom line" on how the NCO at the turn of the century will be able to help the Air Force adapt to change and the problems and challenges that change will bring:

The first impulse for most people is to fix a problem themselves. Managers of culture resist this temptation. They recognize that the longer-lasting solution is to focus on the culture and enable it to find its solution. They know that it's worth it, because when times are tough, the companies with strong cultures can reach deeply into their shared values and beliefs for the courage to see them through. When challenges arise, they can meet them. (15:8)

BIBLIOGRAPHY

References Cited

1. "A Speaker to the Air War College Class of 1987"
2. Andrews, Arthur L. "NCOs Must Display Leadership and Professionalism." Airman Magazine, May 1982, pp. 81-82.
3. Binnicker, CMSgt. James C. "The NCO as a Leader." Supplement to the Air Force Policy Letter for Commanders, January 1981, pp. 37-40.
4. Binkin, Martin. America's Volunteer Military: Progress and Prospects. Washington, D.C.: The Brookings Institution, 1984.
5. Binkin, Martin and Mark J. Eitelberg. Blacks and the Military. Washington, D.C.: The Brookings Institution, 1982.
6. Binkin, Martin and Irene Kyriakopoulos. Paying the Modern Military. Washington, D.C.: The Brookings Institution, 1981.
7. Binkin, Martin and Irene Kyriakopoulos. Youth or Experience? Manning the Modern Military. Washington, D.C.: The Brookings Institution, 1979.
8. Binkin, Martin. Military Technology and Defense Manpower. Washington, D.C.: The Brookings Institution, 1986.
9. Binkin, Martin and Shirley J. Bach. Women and the Military. Washington, D.C.: The Brookings Institution, 1977.
10. Bowman, William, Roger Little and G. Thomas Sicilia, Editors. The All-Volunteer Force After a Decade. McLean, Virginia: Pergamon-Brassey's International Defense Publishers, 1986.
11. Budahn, P. J. "Sec Def Approves Plan to Cut 1,300 AF Officers." Air Force Times, February 9, 1987, pp. 1 & 24.

12. Callendar, Bruce D. "The Evolution of the Air Force NCO." Air Force Magazine, September 1986, pp. 169-173.
13. Clemens, John K. "A Lesson From 431 B.C." Fortune, October 13, 1986, pp. 161-164.
14. Clemens, John K. and Douglas F. Mayer. "The Classics: Management's New Literature." Business Week's Careers, Fall 1986, pp. 46-47.
15. "Corporate Cultures." MacMillan Executive Summary Program. Reading, MA: MacMillan, August 1985.
16. Day, SMSgt George H. "Point: Nonsense, Common Sense, and the Professional NCO." Concepts for Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 2-15-2-20.
17. Deal, Terrence E., and Allen A. Kennedy. Corporate Cultures. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc., 1982.
18. Diebold, John. Making the Future Work. New York: Simon and Schuster, 1984.
19. Drucker, Peter F. The Frontiers of Management. New York: Truman Talley Books, 1986.
20. Finegan, Jay. "Four-Star Management." Inc., January 1987, pp. 42-51.
21. Fuchs, Captain Ron. "Battling Back to the Basics." Airman Magazine, April 1983, pp. 14-19.
22. Gardner, John W. The Moral Aspect of Leadership. Washington, D.C.: Independent Sector, 1987.
23. Gelman, Eric. "Ford's Idea Machine." Newsweek, November 24, 1986, pp. 64-66.
24. Gibbons, Fred M. "The Secrets of Guerrilla Management." Inc., February 1987, pp. 124-125.
25. Hall, Allen. "High Tech Industry and Corporate Culture." Business & Society, Spring 1985, pp. 8-21.
26. Harris, Lorenzo D. "The Sharp Edge of Leadership." Airman Magazine, September 1983, pp. 8-13.

27. Hersey, Paul Dr. The Situational Leader. New York: Warner Brooks Edition, 1984.
28. Hoerr, John et al. "Management Discovers the Human Side of Automation." Business Week, September 29, 1986, pp. 70-75.
29. Interview with Chief Master Sergeant Frank T. Guidas, Jr. Commandant, USAF Senior Noncommissioned Officer Academy, December 1986.
30. Janowitz, Morris. "Technology and Military Leadership." Concepts for Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 2-15-2-20.
31. Kilmann, Ralph H. "Corporate Culture." Psychology Today, April 1985, pp. 62-68.
32. Larson, Arthur D. "Military Professionalism and Civil Control: A Comparative Analysis of Two Interpretations." Concepts For Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 1-5-1-12.
33. Lippitt, Gordon L. Visualizing Change. Fairfax, Virginia: NTL Learning Resources Corporation, Inc., 1973.
34. "Low-Tech Education Threatens The High-Tech Future." Business Week, March 28, 1983, pp. 95-98.
35. Lucas, CMSgt Charles E. "Evolving Role of the NCO." Air Force Magazine, June 1985, P. 143.
36. Margiotta, Colonel Franklin D., USAF. "Future Challenges to Military Leadership." Concepts for Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 1-87-1-94.
37. Marsh, General Robert T., USAF. "Ripe Time For NCO Leadership." Concepts For Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 4-107-4-109.
38. Meyers, Gerald C. and John Holusha. When It Hits The Fan. Boston, MA: Houghton Mifflin Company, 1986.
39. Moskos, Charles C. Jr. "From Institution to Occupation: Trends in Military Organization." Concepts For Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 1-18-1-21.

40. McCormack, Mark H. What They Don't Teach You At Harvard Business School. New York: Bantam Books, 1984.
41. Naisbitt, John. Megatrends. New York: Warner Books, Inc., 1982.
42. O'Malley, Jerome F. "Project Warrior." TIG Brief, 28 May 1982, p. 2.
43. Orr, Honorable Verne, Secretary of the Air Force. "Scientific Illiteracy in the High-Tech Age." Air Force Magazine, January 1983, pp. 73-76.
44. Peters, Thomas J. and Robert H. Waterman, Jr. In Search of Excellence. New York: Harper & Row, 1982.
45. "Project Warrior-AFMPC." TIG Brief, 11 October 1982, p. 3.
46. Raymond, Alan H. "Management in the Third Wave." The Futurist, September-October 1986, pp. 15-17.
47. Reuss, Lloyd E. "Catalysts of Genius, Dealers in Hope." Vital Speeches of the Day, January 1, 1987, pp. 173-176.
48. Rubin, Nancy. "Everybody-Does-It Management." Business Week Careers, Fall 1986, pp. 69-73.
49. Smith, Perry M. Taking Charge - A Practical Guide For Leaders. Washington, D.C.: National Defense University Press, 1986.
50. Stodden, John R., PHD. "The Coming Labor Shortage." Business Week Careers, September 1986, pp. 116-121.
51. Stone, Andrea. "Don't Crumble in a Crisis." USA Today, December 29, 1986, Money Section, p. 2.
52. "The Manager's Bible." MacMillan Executive Summary Program. Reading, MA: MacMillan, July 1985.
53. "Today's Problems, Tomorrow's Crises." National Science Board Commission on Precollege Education in Mathematics, Science and Technology. National Science Foundation, 1982.
54. Toffler, Alvin. Future Shock. New York: Random House, Inc., 1970.

55. Toomay, John C. et al. "Military Leadership: The Implications of Advanced Technology." Concepts For Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 4-99-4-106.

56. U.S. Department of the Air Force: HQ United States Air Force (CV). "Air Force 2000 Project," Washington, D.C., 21 November 1981.

57. U.S. Department of the Air Force. Promotion Fitness Examination (PFE) Study Guide. AF Pamphlet 50-34 Volume 1 Washington, D.C., 1 October 1982.

58. U.S. Department of the Air Force. Basic Aerospace Doctrine of the United States Air Force. AF Manual 1-1. Washington, D.C.: Government Printing Office, 16 March 1984.

59. U.S. Department of the Air Force. Duties and Responsibilities of NCOs. Extension Course Institute, Course 6B, Volume 1, Gunter AFS AL, 1982.

60. Waitley, Denis E. and Robert B. Tucker. Winning the Innovation Game. Old Tappan, New Jersey: Fleming H. Revell Company, 1986.

61. Wellborn, Stanley N. "Ahead: A Nation of Illiterates?" U.S. News & World Report, May 17, 1982, pp. 53-56.

62. Whiteside, David E. "Roger Smith's Campaign to Change the GM Culture." Business Week, April 7, 1986, pp. 84-85.

BIBLIOGRAPHY

Related Sources

Barlow, Jeffrey G. Reforming the Military. The Heritage Foundation, 1981.

Canan, James W. "USAF in the Twenty-First Century." Air Force Magazine, August 1986, pp. 47-52.

Gabriel, General Charles A. "Perspective on Leadership." Airman, January 1984, p. 86-3.

Gabriel, Richard A. Military Incompetence. New York: Hill and Wang, 1985.

Golden, Major James R. "The Future Demands of Military Professionalism: The Views of an Army Major." Concept For Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 1-51-1-57.

Gregory, Gene. "The Japanese Enterprise: Sources of Competitive Strength." Business & Society, Spring 1985, pp. 13-21.

Hall, Allen. "High Tech Industry and Corporate Culture." Business & Society, Spring 1985, pp. 8-21.

Hart, Gary and William S. Lind. America Can Win. Bethesda, Maryland: Adler & Adler, 1986.

Heinl, Robert Debs, Jr. Dictionary of Military and Naval Quotations. Annapolis, Maryland: United States Naval Institute, 1985.

Huntington, Samuel P. The Soldier and the State. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1957.

Huntington, Samuel P. "Officership as a Profession." Concepts for Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 1-13-1-17.

Janowitz, Morris. "From Institutional to Occupational: The Need For Conceptual Continuity." Concepts for Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 1-22-1-23.

Janowitz, Morris. The Professional Soldier. New York: The Free Press, 1960.

Janowitz, Morris. The New Military. New York: Russell Sage Foundation, 1964.

Margiotta, Franklin D. Editor. Changing US Military Manpower Realities. Boulder, Colorado: Westview Press, 1983.

Moskos, Charles C. Jr. Peace Soldiers. Chicago: The University of Chicago Press, 1976.

Moskos, Charles C. Jr. The American Enlisted Man. New York: Russell Sage Foundation, 1970.

Moskos, Charles C. Jr. "Compensation and the Military Institution." Air Force Magazine, April 1978, pp. 31-35.

The President's Commission On An All-Volunteer Armed Force. Washington, D.C.: The Government Printing Office, 1970.

U.S. Department of the Air Force. Noncommissioned Officer Professional Military Education. AF Regulation 50-39. Washington, D.C., 7 November 1983.

U.S. Department of the Air Force. USAF Senior Non-commissioned Officer Academy. Extension Course Institute, Course 8C, Volume 3, Gunter AFS AL, No Date.

U.S. Government: Senate. How Can The United States Best Maintain Manpower For An Effective Defense System? Washington, D.C.: Government Printing Office, December 30, 1963.

Wool, Harold. The Military Specialist. Baltimore: The Johns Hopkins Press, 1968.

Zaleznik, Abraham. "Managers and Leaders: Are They Different?" Concepts for Air Force Leadership, Air University, Maxwell AFB AL, 1983, pp. 4-81-4-88.

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